

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS  
REVISED

PERMITTEE

Dixon Correctional Center  
Attn: James E. Harms  
2600 North Briton  
Dixon, Illinois 61021

<u>Application No.:</u> 73040535	<u>I.D. No.:</u> 103020AAD
<u>Applicant's Designation:</u> DIXON CC	<u>Date Received:</u> August 22, 2002
<u>Subject:</u> Boilers	
<u>Date Issued:</u> August 7, 2002	<u>Expiration Date:</u> November 16, 2005
<u>Location:</u> 2600 North Briton, Dixon	

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of three natural gas-fired boilers, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of nitrogen oxides (NO<sub>x</sub>), and sulfur dioxide (SO<sub>2</sub>) from this facility to less than 100 and 100 tons/year respectively, as further described in Attachment A. As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program permit.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes the current permit(s) issued for this location.
- 2a. The three (3) 82.5 mmBtu/hour natural gas boilers are subject to a New Source Performance Standard (NSPS) for Small Industrial, Commercial, and Industrial Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering HSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. At all times the Permittee shall maintain and operate the boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required by the NSPS, 40 CFR 60.11(d).
3. The Permittee shall fulfill applicable notification and recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.48c.
- 4a. Operation of the three boilers shall not exceed the following limits:  
  
Total Combined Natural Gas Usage: 65 mmft<sup>3</sup>/month not to exceed 246 mmft<sup>3</sup>/year.



- b. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.
- c. Emissions from the three boilers when firing natural gas shall not exceed the following limits:

<u>Pollutant</u>	<u>Fuel Usage (mmft<sup>3</sup>/Yr)</u>	<u>Emission Factor (Lb/mmft<sup>3</sup>)</u>	<u>Emissions (Ton/Yr)</u>
NO <sub>x</sub>	246	100	12.3
CO	246	84	10.3
VOM	246	5.5	0.7
SO <sub>2</sub>	246	0.6	0.07
PM	246	7.6	0.93
Total:			24.3

This table defines the potential emissions of the three boilers and are based on the combustion of only natural gas, standard emission factors and maximum annual fuel usage.

Note: mm = Million

- d. Compliance with annual limits immediately following the issuance date of this permit shall be determined using available data from the previous months.
5. The Permittee shall maintain records of the following items:
  - a. Natural gas usage for the three (3) boilers (ft<sup>3</sup>/month and ft<sup>3</sup>/year).
6. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
7. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
8. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report

shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

9. The Permittee shall submit the following additional information from the prior calendar year with the Annual Emission Report, due May 1st each year:

- a. Natural gas usage.

10. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5415 North University  
Peoria, Illinois 61614

It should be noted that the 4,000 gallon gasoline storage tank is exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 210.146(n).

Please note that this permit has been revised to no longer include operation of six (6) #2 fuel oil storage tanks.

Please note, this permit has been revised to remove all conditions and emission limits pertaining to the combustion of #2 fuel oil.

If you have any questions on this, please call Ross Cooper at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:RWC:jar

cc: IEPA, FOS Region 2  
CASM

### Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from gas-fired boilers operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of NO<sub>x</sub> and SO<sub>2</sub>, at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

1. Emissions from the three boilers when firing natural gas shall not exceed the following limits:

<u>Pollutant</u>	<u>Fuel Usage (mmft<sup>3</sup>/Yr)</u>	<u>Emission Factor (Lb/mmft<sup>3</sup>)</u>	<u>Emissions (Ton/Yr)</u>
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